



FLATRON Slim

MONITOR PRICE TEST 2006



MUSE / PANTONE SOURCE ALTIMET

**Fancy an LCD but can't decide on the right size and model?
Computer Shopper's Monitor Price Test 2006 has the answer.
With 18 LCDs on test, it's the UK's largest display Labs**

If your desk is still submerged under the bulk of a CRT screen, it's high time you sent it to the great landfill in the sky and invested in a liquid crystal display (LCD) screen. LCD screens are smaller, lighter and produce a sharper image than CRT displays, and they take up hardly any space at all. If you've already got a 15" or 17" LCD, though, it might be the right time to upgrade to a larger screen or one with a higher resolution.

This month we've tested 18 LCD screens. Six are 17" models, which are ideal for those who want a flat-screen display at a reasonable price.

Six are 19" models, which have the same resolution but a larger panel that's easier on the eyes. We've also tested six screens that have panels larger than 20". These are more expensive, but they have a higher resolution that's perfect for professional or more demanding users.

We've put each display through a set of stringent tests to ascertain any problems with image quality. Whether you dabble in digital photo editing, like to watch DVDs on your computer or spend hours using your computer for office work, this price test is sure to help you choose the ideal display for your needs.

IN THIS REVIEW

17" LCD Monitors

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NEC MultiSync 1770NX
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ViewSonic VX724

19" LCD Monitors

Acer AL1951A
Belinea 10 19 25
Iiyama ProLite X486S
LaCie 319
LG Flatron L1980Q
Philips 190P

20.1" LCD Monitors

AOC LM2028
LG Flatron L2013P
Philips 200W6
Sony SDM-S204E

21.3" LCD Monitor

Iiyama ProLite H2130
NEC MultiSync 2180UX



CHOOSING AN... LCD MONITOR

Before you commit to the LCD of your dreams, you must decide whether your priority is size, colour accuracy, pixel response or something else. Our guide makes your decision crystal clear

HOW WE TESTED

We put all the LCD screens in this group through a barrage of exacting tests to uncover any deficiencies in the quality of the images they produce.

Our solid colour tests are used to spot uneven backlighting or inaccurate colours. Black should be pitch dark, with no light leakage either through the panel or around the bezel, and white should be pure without any coloured tint. Primary colours should be vivid and uniform across the entire screen area.

We used a number of high-resolution photos to examine colour accuracy. Some portrait pictures reproduce skin tones in astonishing detail and often reveal unbalanced colours. Skin texture is another good test of how well a screen picks out fine detail – some do this better than others.

To test a monitor's ability to display all brightness levels accurately, we used an image of a smooth greyscale gradation from black to white. Panels should be able to distinguish every shade of grey in between, but this is seldom the case. There are a number of common problems, included banding, where the brightness dips in large noticeable steps, and discoloured bands, where colour creeps into what should be a black-and-white image. Many monitors can't display either or both extremes of the gradient, with the scale becoming too bright or too dark too soon.

All the monitors have a stated pixel response time, but we test all screens with a variety of fast-moving images. These segments taken from games and movies enable us to assess the suitability of each screen for entertainment use.

Although we recommend using a digital visual interface (DVI) connection where possible, we test each screen using both analogue and digital inputs. DVI should produce a perfect image, and most modern LCD screens can convert an analogue signal into a sharp image at the touch of a button.



Our tests determine which displays can reproduce colours accurately

The displays in this test range from around £180 to almost £900, which means there's plenty to consider before you open your wallet. Size and value for money are obviously important, but it's also worth paying attention to the number and type of inputs, how easily the screen can be manipulated and the presence of useful extras such as USB hubs or speakers.

Before you even think about these, though, you need to think about what you'll use your display for. If you're interested in digital photography, colour accuracy should be at the top of your list. If you have a powerful PC and play 3D games, look for a screen with a fast pixel response time to prevent blurring. If you are a designer and need to work on large documents or images, get a high-resolution display that can show a lot onscreen at once.

EYE SPY

The size of an LCD is measured across the screen, diagonally, in inches. The most common sizes are 15", 17", 19", 20.1" and 21.3", but we consider 15" screens too small for everyday use. We've divided them into three groups: 17", 19" and 20" or above.

The 17" displays have a native resolution of 1,280x1,024, which provides plenty of Windows desktop space and is ideal for surfing the web, working with digital photos and word processing. The 19" displays have the same resolution and so display the same amount of visual information as 17" displays, but they are easier on the eye and better if you want to watch DVDs from a distance.

If you want a higher resolution, you need to make the jump to a 20.1" or 21.3" display. These both have a native resolution of 1,600x1,200 and display almost 50 per cent more information than a

17" or 19" display. Until recently these large screens were prohibitively expensive, but they are becoming more affordable. AOC's LM2028 now costs less than £350 including VAT. Windows can seem lost in this amount of space, but creative artists and designers will find the extra room ideal.

EYE TEST

Most monitors in this group test produce an image that will satisfy computer users. To differentiate between them, we had to be rigorous in our testing. To find out more about our testing methods, see 'How We Tested', opposite.

We found that the price of an LCD is an unreliable indicator of its image quality. Our reviews explain which can reproduce colours and greyscales accurately, and which had problems producing pure white and pitch black.

ASSUME THE POSITION

The monitor is the most visible part of your PC and remains on your desk even when it's switched off, so it helps to find one that looks good. Attractive monitors are useless if you can't get them into the right position, though, so it's important that you find a display that you can adjust to suit your needs. We prefer displays that can be adjusted vertically as well as horizontally for comfortable viewing. The option to pivot the screen into portrait mode is useful for designers and photographers who want to make the most of the resolution.

As with most PC equipment, the extras included with certain displays are useful only if you will use them. Most built-in speakers are a poor substitute for a proper speaker system, but a built-in USB hub can be handy.

LCD MONITOR SIZES COMPARED

	15"	17"	19"	20"
Native resolution	1,024x768	1,280x1,024	1,280x1,024	1,600x1,200
Aspect ratio	4:3	5:4	5:4	4:3
Amount on screen				
Actual size of menus				
Typical price	£110-£220	£140-£350	£200-£500	£400-£700



REVIEW 17" LCD

ACER
AL1722r

RATING ★★★★★

PRICE £180 inc VAT

SUPPLIER www.laptopsdirect.co.ukDETAILS www.acer.co.uk

Acer's AL1722r monitor disguises its budget price well with an attractive design and solid build quality. It can swivel to portrait mode and has one of the largest vertical travel ranges of the 17" screens here, although its joints are stiff and require you to hold the base as you position the panel to your liking.

It has a DVI input, but the image is just as sharp through the analogue connection after using the auto-adjust function. The AL1722r is a good choice for fast-paced games with its 8ms response time, but if your interests include digital photography or video work, you won't be impressed by the washed-out colours, milky blacks and lack of an sRGB colour mode. Its relatively tight viewing angles were also disappointing.

DESIGN ★★★★★
IMAGE QUALITY ★★★★★
FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers. Part code ET.L0408.073



REVIEW 17" LCD

BELINEA
10 17 30

RATING ★★★★★

PRICE £217 inc VAT

SUPPLIER www.wedgewood-group.co.ukDETAILS www.belinea.co.uk

If traditional beige computer styling makes a comeback, Belinea's 10 17 30 will be the height of fashion, but at the moment it looks drab and sorry. Its stereo speakers are the best of a bad bunch, though, and its pivot, tilt and height adjustment mechanisms are smooth; it takes little effort to position the screen. You can swivel the screen to portrait mode, but there are no cable guides at the back so this looks messy.

With its response time of 8ms, the 10 17 30 produced a blur-free image in our fast-moving image test, so it's fine for gaming. It produced bright, vivid colours and smooth, subtle transitions, but it took some tweaking to achieve an untainted white. It's a fine choice if style and perfect colour accuracy are not your main concerns.

DESIGN ★★★★★
IMAGE QUALITY ★★★★★
FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers. Part code 10 17 30 (Art # 11 17 44)



REVIEW 17" LCD

IIYAMA
ProLite H431S

RATING ★★★★★

PRICE £216 inc VAT

SUPPLIER www.scan.co.ukDETAILS www.iiyama.co.uk

Iiyama's ProLite H431S has a tiny bezel that makes it less obtrusive than most, but it still feels well constructed. A set of stereo speakers occupies the bottom edge of the panel but they sound woeful, so it's better to listen through the headphone socket instead.

The image is pin-sharp whether you use the D-sub or DVI input. The H431S produced a balanced greyscale free from banding, and well-defined colours, although when we used DVI there was some banded flickering distortion in dark areas that we could eliminate only by switching to the analogue input. Skin tones were pleasant and the high contrast level helped to show detail in very dark areas. If you don't want your monitor to dominate your desk space, the H431S is an attractive option.

DESIGN ★★★★★
IMAGE QUALITY ★★★★★
FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers. Part code PLH431S-B3S



REVIEW 17" LCD

NEC
MultiSync 1770NX

RATING ★★★★★

PRICE £205 inc VAT

SUPPLIER www.komplett.co.ukDETAILS www.nec.co.uk

NEC's 1770NX is the same colour as Belinea's 10 17 30, but its design makes it look less dated. A well-sprung riser mechanism makes it easy to adjust the screen's height. The nicely framed panel lacks a portrait mode, which some might find annoying, but the controls hanging from the bottom edge of the panel feel solid and are easy to use.

The 1770NX displayed bright, vibrant and well-defined colours and warm skin tones. A reasonably smooth greyscale helped to pick out fine detail in dark and light areas, while an 8ms response time ensured that fast-moving games were pin sharp. If you don't need a portrait mode or internal speakers, the 1770NX is an excellent buy.

DESIGN ★★★★★
IMAGE QUALITY ★★★★★
FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI. Part code LCD1770NX



REVIEW 17" LCD

SAMSUNG
SyncMaster 173p Plus

RATING ★★★★★

PRICE £249 inc VAT

SUPPLIER www.digiuk.comDETAILS www.samsung.co.uk

Samsung's SyncMaster 173P Plus is a nimble screen. The panel is held by an angled arm that allows it to lie flat on your desk. The VESA wall mount is in the base of the unit, so even when mounted the screen maintains its full range of movement. There are no controls on the screen itself, though, so you have to make any adjustments through the software driver.

The 173P Plus had a slow response time, so fast-moving games and DVDs were slightly blurry, but it had incredible contrast and the widest viewing angles of any screen on test. Colours were rich and smooth and the greyscale linear, while skin tones were warm. If you don't play games or watch movies on your PC, this is a desirable if expensive screen.

DESIGN ★★★★★
IMAGE QUALITY ★★★★★
FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI. Part code DE17PSQAQ/EDC



REVIEW 17" LCD

VIEWSONIC
VX724

RATING ★★★★★

PRICE £223 inc VAT

SUPPLIER www.misco.co.ukDETAILS www.viewsonic.co.uk

The VX724 is aimed at game-players for whom colour depth and accuracy are less important than speed. Its response time of 5.4ms displayed games flawlessly, although the improvement over 8ms screens was slight. Both DVI and D-sub inputs produced a pin-sharp picture, but you'll have to activate the auto adjust to set up the analogue signal properly.

The vibrant colours make this display great for gaming but less so for accurate photo manipulation and, as with Iiyama's H431S, there was flickering in dark areas at full brightness when using DVI. Adjustment options are limited, so the VX724 is not ideal for office use. The main problem is its price: it's expensive given the limited improvement over 8ms screens.

DESIGN ★★★★★
IMAGE QUALITY ★★★★★
FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI. Part code VS10049





REVIEW 19" LCD

ACER
AL1951A

RATING ★★★★★

PRICE £272 inc VAT

SUPPLIER www.0-one.co.ukDETAILS www.acer.co.uk

The most striking aspect of Acer's AL1951A is its glossy screen. This increases contrast and gives colours an added kick, but the deep blacks we expected turned out milky as too much light leaked through. The glossy surface also increased ambient reflection, so it's not ideal for use in a brightly lit office. With the lights turned down, however, games and movies looked fantastic. The colours were bright and punchy, but lacked the definition required for intricate photographic or art work.

The stand affords little physical adjustment, but the wall mount is fitted to the base rather than the panel's rear so you can still use the tilt adjustment. It's reasonably cheap, but this doesn't compensate enough for the milky blacks.

DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers. **Part code** ET.L4180.012



REVIEW 19" LCD

BELINEA
10 19 25

RATING ★★★★★

PRICE £236 inc VAT

SUPPLIER www.0-one.co.ukDETAILS www.belinea.co.uk

Belinea's 10 19 25 is fairly ugly, but it has several redeeming features. Not least of these is its image quality. Although colours lacked the punch of those from other displays in this test, they were well balanced and clean with an even backlight. Detail was maintained in dark areas, but skin tones lacked warmth.

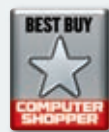
Speakers are fitted on the bottom bezel either side of the cheap-feeling buttons. These are adequate for basic Windows sounds but little else. Belinea has integrated a three-port USB hub in the neck of the stand. This is useful but inelegant, as the upstream connection to the computer protrudes from its side. If you want a decent 19" LCD that doesn't cost a fortune, though, this is an excellent buy.

DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers, three-port USB. **Part code** 10 19 25 (Art # 11 19 24)



REVIEW 19" LCD

IIYAMA
ProLite X486S

RATING ★★★★★

PRICE £305 inc VAT

SUPPLIER www.komplett.co.ukDETAILS www.iiyama.co.uk

The control buttons, USB port and headphone jack are all hidden on the right edge of Iiyama's ProLite X486S; only the power management motion sensor and ambient light sensor break the classy matte metallic surround. The panel's hinge allows only for tilt adjustment, though, so you may have to sit it on a few copies of *Computer Shopper* to find eye level.

The X486S produced a reliable image. Colours were accurate with warm skin tones. Greyscales were smooth and linear but when we used the DVI input with the brightness set to maximum we saw some banded interference in dark areas. Like most 19" LCDs here, its 8ms response time ensures blur-free gaming. If you can forgive the slight interference in DVI mode, this is an excellent 19" screen.

DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers, one-port USB. **Part code** PLX486S-SQS



REVIEW 19" LCD

LACIE
319

RATING ★★★★★

PRICE £626 inc VAT

SUPPLIER www.novatech.co.ukDETAILS www.lacie.co.uk

As its exorbitant price indicates, LaCie's chunky 319 display is aimed at the professional end of the market. It comes with a sturdy, velvet-lined hood and can accept a 10-bit gamma input through either of its two DVI or single D-sub inputs. This increases the number of shades of each colour available from 256 to 1,024, making for more realistic transitions. Even in standard eight-bit gamma, colours were strikingly accurate and definition was superb across all contrast and brightness levels. It has a slow 18ms response time, though, so it isn't for gamers.

The onscreen image was second to none. If you want to get serious about digital photography, this is a great alternative to larger professional screens.

DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, 2x DVI. **Part code** L193FH



REVIEW 19" LCD

LG
Flatron L1980Q

RATING ★★★★★

PRICE £325 inc VAT

SUPPLIER www.savastore.comDETAILS www.lge.co.uk

LG's wafer-thin L1980Q is supported by a clever arm that provides an impressive range of movement; it can fold flat to the desk and rotate 90 degrees into portrait mode. It has an external power supply and all cables feed into the base, which also houses the wall mount. The control buttons are touch sensitive. This may sound a good idea, but in practice the buttons were incredibly frustrating to use.

Sadly the picture quality didn't live up to these designer aspirations. Colours were bright and loud, but the picture lacked definition in both light and dark areas. Skin tones looked cold and washed out. It might look nice on a reception desk, but the L1980Q doesn't produce a good enough image.

DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI. **Part code** L1980QN-ANUKG



REVIEW 19" LCD

PHILIPS
190P

RATING ★★★★★

PRICE £343 inc VAT

SUPPLIER www.savastore.co.ukDETAILS www.philips.co.uk

Although it's fairly unattractive, Philips' 190P is physically the most accomplished 19" screen on test. It has a full range of movement – tilt, swivel, portrait and height adjustment – as well as a four-port USB hub and loud, punchy speakers. Unfortunately, it's also got the least-effective panel in this group.

Bright colours and big, bold contrast gave a good initial visual impact, but colour transitions were far from smooth, and our greyscale test showed obvious banding. Mid-tones were loud, but definition was lost in both dark and light areas, making the 190P frustrating for all but office use. Despite its physical versatility, the 190P doesn't produce a good enough picture to justify its high price.

DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers, four-port USB. **Part code** 190P6ES/00





REVIEW 20.1" LCD

AOC
LM2028

RATING ★★★★★

PRICE £348 inc VAT

SUPPLIER www.pcnextday.co.ukDETAILS www.aocmonitor.com

At only £348, AOC's LM2028 is cheaper than some of the 19" screens in this group. Its 20.1" panel has a native resolution of 1,600x1,200 and on paper it is the equal of the 20.1" LG and Sony screens. Adjustment options have been sacrificed to keep the price down, though: vertical adjustment is minimal, so you may have trouble finding a comfortable viewing position. The LM2028 produced a decent image. On its default setting, whites weren't as true as we'd like, but the colour balance was generally accurate. Our greyscale tests showed a smooth transition.

Its image quality isn't quite as good as that of the other 20.1" monitors, but the LM2028 is a decent screen at a great price. Unless you need perfect colour accuracy, it's a bargain.



DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,600x1,200 native resolution, D-sub, DVI.
Part code TFT2090PS+

REVIEW 21.3" LCD

IIYAMA
ProLite H2130

RATING ★★★★★

PRICE £882 inc VAT

SUPPLIER www.xtsit.comDETAILS www.iiyama.co.uk

Six months ago, Iiyama's H2130 won plaudits for its incredible image quality, excellent design and the host of useful features built-in. All this remains true today. The swing-down speakers and the four-port USB hub hidden on the rear will be useful to most users, and the bulky panel rotates easily into portrait mode.

The image quality is exemplary. We found its default colour reproduction to be spot on. It can also be fully customised and supports 10-bit gamma for smoother colour transitions. Its greyscales were not quite as even as those from NEC's 2180UX, but the difference is marginal. For those seeking a professional display with all the trimmings, the ProLite H2130 is a great choice. However, it's too expensive for most users.



DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,600x1,200 native resolution, D-sub, 2x DVI, speakers, four-port USB. Part code PLH2130-W1

REVIEW 20.1" LCD

LG
Flatron L2013P

RATING ★★★★★

PRICE £518 inc VAT

SUPPLIER www.savastore.comDETAILS www.lge.co.uk

LG's Flatron L2013P is one of four 20.1" displays in this test. Its bezel and buttons bear a striking resemblance to those of the LaCie photon20vision II reviewed in our LCD Labs, *Shopper* June 2005, but the LG costs £100 less and its stand is different. The heavy panel is easy to rotate into portrait mode, but its two-stage height adjustment is a bit clunky.

Strangely, when using a DVI input the only colour correction options available are those of Light View, a system that provides fixed day and night settings for text, movies and photo work. This lack of direct colour control is disappointing in a professional monitor, and the default colour setting produced slightly discoloured whites. At this price, we expect more control and better image quality.



DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,600x1,200 native resolution, D-sub, DVI.
Part code L2013PM-ALUKQF

REVIEW 21.3" LCD

NEC
MultiSync 2180UX

RATING ★★★★★

PRICE £873 inc VAT

SUPPLIER www.savastore.comDETAILS www.nec.co.uk

NEC's 2180UX has a 21.3" screen and looks much more imposing than 20.1" models. There's no USB hub, but you can rotate the panel into portrait mode with an ease that belies its weight.

The slim bezel and no-nonsense stand look professional, and this impression is confirmed when the screen is turned on. The extra inch might be an expensive investment, but in terms of image quality the NEC is irreproachable. It produced a perfectly smooth transition in our greyscale tests. Its colour reproduction can be customised, but the default settings couldn't be bettered. There is little between the two largest screens here, but the MultiSync 2180UX has a fractionally better picture than Iiyama's ProLite H2130.



DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,600x1,200 native resolution, D-sub, 2x DVI.
Part code L213E9

REVIEW 20.1" LCD

PHILIPS
200W6

RATING ★★★★★

PRICE £450 inc VAT

SUPPLIER www.savastore.comDETAILS www.philips.co.uk

Widescreen displays are becoming common on notebook PCs, but they're still quite rare for desktops. Philips' 200W6 20.1" display has a native resolution of 1,680x1,050, giving it an aspect ratio of 16:10. This unusual size allows you to open two A4 documents side by side.

Sadly, the 200W6's image wasn't up to professional standards. Our colour transition and greyscale tests revealed significant banding, and most photographs lacked the contrast range that more accomplished screens produce. At £450, the 200W6 is a reasonably priced widescreen panel and will prove useful if you work on more than one document at a time, but its image quality is below the level designers and publishers require.



DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,680x1,050 native resolution, D-sub, DVI, one-port USB. Part code 200W6CS/00

REVIEW 20.1" LCD

SONY
SDM-S204E

RATING ★★★★★

PRICE £543 inc VAT

SUPPLIER www.morecomputers.co.ukDETAILS www.sony.co.uk

Sony's SDM-S204E has a minimalist appearance and looks professional. It's easy to adjust vertically, but the sliding stand mechanism doesn't allow the screen to swivel into portrait mode. It has no built-in speakers or USB hub.

Colours were generally satisfactory, but in standard sRGB mode whites had a very slight green tint. Our greyscale test returned excellent results, with a smooth, linear transition from light to dark. The D-sub analogue input produced an acceptably sharp image, but we'd recommend using the DVI connector for perfect focus.

The SDM-S204E is a decent monitor, but its murky white and lack of a portrait mode are annoying. It can't quite compete with more professional high-resolution displays.



DESIGN ★★★★★

IMAGE QUALITY ★★★★★

FEATURES ★★★★★

SPECIFICATIONS 1,600x1,200 native resolution, 2x D-sub, DVI, speakers. Part code SDM-S204E



17" LCDs

MANUFACTURER	ACER	BELINEA	IYAMA	NEC	SAMSUNG	VIEWSONIC
Model	AL1722r	10 17 30	ProLite H43IS	MultiSync 1770NX	173P Plus	VX724
Overall rating	★★★	★★★★	★★★★	★★★★★	★★★★	★★★
Design	★★★	★★★	★★★★	★★★★	★★★★★	★★★
Image quality	★★	★★★	★★★★	★★★★★	★★★★	★★★
Features	★★★★	★★★★	★★★	★★★	★★★★	★★
PHYSICAL						
Viewable size	17"	17"	17"	17"	17"	17"
Pixel pitch	0.264mm	0.264mm	0.264mm	0.264mm	0.264mm	0.264mm
Native resolution	1,280x1,024	1,280x1,024	1,280x1,024	1,280x1,024	1,280x1,024	1,280x1,024
Aspect ratio	5:4	5:4	5:4	5:4	5:4	5:4
Response time	8ms	8ms	8ms	8ms	25ms	6ms
Contrast ratio	700:1	500:1	700:1	600:1	1,500:1	500:1
Brightness (cd/m²)	300	300	300	250	270	300
Bezel size	17mm	19mm	13mm	13mm	20mm	23mm
Screen depth	50mm	66mm	55mm	60mm	26mm	62mm
Base (WxD)	250x177mm	233x220mm	300x240mm	195x195mm	215x237mm	285x175mm
Screen elevation	97 to 200mm	91 to 195mm	76 to 186mm	75 to 184mm	51 to 103mm	148mm
FEATURES						
Portrait mode	Yes	Yes	Yes	No	Yes	No
Wall mount option	Yes	Yes	Yes	Yes	Yes	Yes
Height adjustable	Yes	Yes	Yes	Yes	Yes	No
Integrated speakers	Yes	Yes	Yes	No	No	No
Detachable cables	Yes	Yes	Yes	Yes	Yes	Yes
USB ports	No	No	No	No	No	No
Integrated power supply	No	Yes	Yes	Yes	No	Yes
Kensington lock lug	Yes	Yes	Yes	Yes	Yes	Yes
Connections	D-sub, DVI, line in	D-sub, DVI, line in	D-sub, DVI, line in, headphone	D-sub, DVI	D-sub, DVI	D-sub, DVI
ENVIRONMENTAL						
Normal consumption	45W	45W	39W	36W	40W	35W
Suspend consumption	2W	4W	2W	2W	2W	<1W
TCO (99 or 03)	TCO03	TCO99	TCO99	TCO03	TCO03	TCO99
BUYING INFORMATION						
Warranty	Three years	Three years	Three years	Three years	Three years	Three years
Price ex VAT	£153	£165	£183	£174	£212	£190
Price inc VAT	£180	£217	£216	£205	£249	£223
Supplier	Laptops Direct	Wedgewood Group	Scan Computers	Komplett	DigiUK	Misco
Supplier phone	08701 670818	01754 769967	08707 554747	08712 770024	01386 556633	08000 388880
Supplier website	www.laptopsdirect.co.uk	www.wedgewood-group.com	www.scan.co.uk	www.komplett.co.uk	www.digiuk.com	www.misco.co.uk
Details	www.acer.co.uk	www.belinea.co.uk	www.iyama.co.uk	www.nec.co.uk	www.samsung.co.uk	www.viewsonic.co.uk
Part code	ETL0408.073	10 17 30 (Art # 11 17 44)	PLH431S-B3S	LCD1770NX	DE17PSQAQ/EDC	VS10049

LABS VERDICT
LCD MONITORS

We were impressed with most of the displays on test. Almost all provide acceptable image quality, but if you follow our recommendations, you can buy an excellent screen for a reasonable price.

Of the 17" displays, NEC's 1770NX is the best. It can't rotate into portrait mode, but its image quality is excellent, its response time is fast enough for gaming and it's one of the cheapest screens here. It wins a Best Buy award.

LaCie's 319 is the most technically advanced of the 19" displays, but it's expensive. Belinea's 10 19 25 is slightly unattractive, but it's a fine screen for a modest price. It produces well-balanced colours with even lighting and enough detail in dark areas. It wins our Best Buy award.

Of those monitors that are larger than 20", AOC's LM2028 is excellent value. Its image quality isn't as good as that of the professional-level screens, but it produces accurate colours and little banding for less than £350. It also wins our Best Buy award. **ES**

17" LCD



19" LCD



20" LCD



19" LCDs

MANUFACTURER	ACER	BELINEA	IYAMA	LACIE	LG	PHILIPS	AOC	IYAMA	LG	NEC	PHILIPS	SONY
Model	AL1951A	10 19 25	ProLite X486S	319	Flatron L1980Q	190P	LM2028	ProLite H2130	Flatron L2013P	MultiSync 2180UX	200W6	SDM-S204E
Overall rating	★★★	★★★★★	★★★★★	★★★★	★★	★★	★★★★★	★★★★★	★★★★	★★★★★	★★★	★★★
Design	★★★	★★	★★★★	★★★★	★★★★	★★★	★★★	★★★★	★★★	★★★★★	★★★★	★★★★★
Image quality	★★★	★★★★	★★★★	★★★★★	★★	★★	★★★	★★★★★	★★★	★★★★★	★★	★★★
Features	★★	★★★★	★★★★	★★★★	★★	★★★★★	★★	★★★★★	★★★★	★★★★	★★★★	★★
PHYSICAL												
Viewable size	19"	19"	19"	19"	19"	19"	20.1"	21.3"	20.1"	21.3"	20.1"	20.1"
Pixel pitch	0.294mm	0.294mm	0.294mm	0.294mm	0.294mm	0.294mm	0.255	0.270mm	0.255mm	0.270mm	0.258mm	0.255
Native resolution	1,280x1,024	1,280x1,024	1,280x1,024	1,280x1,024	1,280x1,024	1,280x1,024	1,600x1,200	1,600x1,200	1,600x1,200	1,600x1,200	1,680x1,050	1,600x1,200
Aspect ratio	5:4	5:4	5:4	5:4	5:4	5:4	4:3	4:3	4:3	4:3	16:10	4:3
Response time	8ms	8ms	8ms	18ms	8ms	8ms	16ms	20ms	16ms	20ms	16ms	16ms
Contrast ratio	700:1	500:1	700:1	600:1	500:1	600:1	700:1	500:1	500:1	500:1	600:1	500:1
Brightness (cd/m²)	400	270	300	270	250	250	250	280	250	250	300	250
Bezel size	18mm	15mm	20mm	11mm	21mm	23mm	17mm	14mm	17mm	15mm	20mm	14mm
Screen depth	42mm	43mm	62mm	80mm	35mm	68mm	70mm	85mm	72mm	84mm	69mm	71mm
Base (WxD)	250x155mm	275x210mm	180x150mm	180x200mm	262x262mm	310x215mm	278x247mm	343x240mm	242x242mm	180x200mm	235x235mm	231x231mm
Screen elevation	104mm	124mm	96mm	49 to 180mm	45 to 85mm	116 to 255mm	33 to 90mm	82 to 185mm	130 to 220mm	50 to 170mm	90 to 140mm	50 to 150mm
FEATURES												
Portrait mode	No	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No
Wall mount option	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Height adjustable	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Integrated speakers	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	Yes	No
Detachable cables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
USB ports	No	3 ports	1 port	No	No	4 ports	No	4 ports	No	No	1 port	No
Integrated power supply	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kensington lock lug	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Connections	D-sub, DVI, line in	D-sub, DVI, line in	D-sub, DVI, line in, headphone	D-sub, 2x DVI	D-sub, DVI	D-sub, DVI, line in, headphone	D-sub, DVI	D-sub out, 2x DVI, line in	D-sub, DVI	D-sub, 2x DVI	D-sub, DVI, line in, headphone	2x D-sub, DVI
ENVIRONMENTAL												
Normal consumption	50W	50W	38W	48W	43W	52.5W	60W	53W	60W	52W	50W	58W
Suspend consumption	5W	4W	2W	2W	2W	1W	Not disclosed	4W	5W	1W	1.5W	1W
TCO (99 or 03)	TCO99	TCO99	TCO99	TCO99	TCO99	TCO03	TCO99	TCO03	TCO03	TCO03	TCO03	TCO99
BUYING INFORMATION												
Warranty	Three years	Three years	Three years	Three years	Three years	Three years	Three years	Three years	Three years	Three years	Three years	Three years
Price ex VAT	£227	£201	£260	£533	£276	£292	£296	£750	£441	£743	£383	£458
Price inc VAT	£272	£236	£305	£626	£325	£343	£348	£882	£518	£873	£450	£543
Supplier	Savastore.com	ZerOne Computers	Komplett	Novatech	Savastore.com	Savastore.com	PC Nextday	XtsIT	Savastore.com	Savastore.com	Epcbuyer	More Computers
Supplier phone	08716 661616	08000 196467	08712 770024	08701 120912	08716 661616	08716 661616	Web only	N/A	08716 661616	08716 661616	08703 505620	08700 434182
Supplier website	www.savastore.com	www.0-one.co.uk	www.komplett.co.uk	www.novatech.co.uk	www.savastore.com	www.savastore.com	www.pcnextday.co.uk	www.xtsit.com	www.savastore.com	www.savastore.com	www.savastore.co.uk	www.morecomputers.co.uk
Details	www.acer.co.uk	www.belinea.co.uk	www.iyama.co.uk	www.lacie.co.uk	www.lge.co.uk	www.philips.co.uk	www.aocmonitor.com	www.iyama.co.uk	www.lge.co.uk	www.nec.co.uk	www.philips.co.uk	www.sony.co.uk
Part code	ETL1480.012	10 19 25 (Art # 11 19 24)	PLX486S-S0S	L193FH	L1980QN-ANUKG	190P6ES/00	TFT2090PS+	PLH2130-W1	L2013PM-ALUKQF	L213E9	200W6CS/00	SDM-S204E